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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,581	01/27/2004	Akio Uchiyama	17406	3837

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EXAMINER

KASZTEJNA, MATTHEW JOHN

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/766,581

Applicant(s)

UCHIYAMA, AKIO

Examiner

Matthew J. Kasztejna

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Notice of Amendment

In response to the amendment filed on May 12, 2005, amended claims 1, 3-4, 8, 11-19 and 21-24; canceled claim 20 and new claims 25-28 are acknowledged. Claims 1-7, 9-10, and 21-24 stand rejected under 35 USC § 102. Claims 8 and 17 stand rejected under 35 USC § 103. The following new and reiterated grounds of rejection are set forth:

Claim Objections

Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 6 is nearly identical to amended claim 4.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 25 recites the limitation "said detected movement" in line 3 of claim 25.

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-7, 9-10, and 21-24 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent Application Publication No. 2002/0103417 to Gazdzinski.

In regards to claim 1, Gazdzinski discloses a capsule medical device 300 inserted into a body cavity, comprising: a sensor 1010, a transmitting device for transmitting sensing data acquired by the sensor to an external device outside the body cavity (see Paragraph 0015); a receiving device 1027 for receiving data from outside the capsule medical device the received data being inherently generated by external signal processing of the sensing data (see Paragraph 0038); and a storage device 1026 wherein storage data stored therein can be rewritten on the basis of the data received by the receiving device (see Paragraph 0015). A flash memory of the digital signal processor may be modified by way of program data transmitted to the probe via the data transfer sub-circuit.

In regards to claim 2, Gazdzinski discloses a capsule medical device wherein the storage device 1026 is a storage device in which the storage data is not erased, even when the power supply is switched off (see Paragraph 075).

In regards to claim 3, Gazdzinski discloses a capsule medical device wherein the sensor operates on the basis of information stored in the storage device (see Paragraph 0067).

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In regards to claims 4 and 6, Gazdzinski discloses a capsule medical device wherein the capsule medical device has an image-acquiring device 1010 being a CCD image sensor; and the image-acquiring device operates on the basis of information stored in the storage device (see Paragraph 0067).

In regards to claim 5, Gazdzinski discloses a capsule medical device wherein the image-acquiring device has an illumination device 1014; and the illumination device operates on the basis of information stored in the storage device (see Paragraph 70).

In regards to claim 7, Gazdzinski discloses a capsule medical device wherein the image-acquiring device has an image data-compressing device; and the image data-compressing device operates on the basis of information stored in the storage device (see Paragraph 0015).

In regards to claims 9-10, Gazdzinski discloses a capsule medical device having a medicine discharge device or a specimen recovery device, operated on the basis of information stored in the storage device (see Paragraph 0076).

In regards to claims 21-24, the apparatus of Gazdzinski is considered to be inherently capable of performing the recited method claims (see paragraph 0088).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 8, 11-16, 18-19 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0103417 to Gazdzinski in view of U.S. Patent No. 6,709,387 to Glukhovsky et al.

In regards to claims 8 and 25-26, Gazdzinski discloses a capsule medical device but is silent with respect to the capsule device having a force acquiring device for detecting movement of the capsule. Glukhovsky et al. teach of an analogous in vivo camera system that has a sensor 11 which measures motion directly or indirectly and is attached to, or placed within the capsule 6 and relays the value of the measured motion-related physical property to data processor 14 and is used to control the frame capture rate (see Col. 4, Lines 35-59). It would have been obvious to one skilled in the art at the time the invention was made to have a force acquiring device for detecting movement of the capsule in the apparatus of Gazdzinski in order to better control data parameters as taught by Glukhovsky et al.

In regards to claim 11, Gazdzinski discloses a capsule medical device but is silent with respect to the capsule device having a correction amount calculating circuit for generating adjustments to the data parameters transmitted by the capsule medical device and received by the external device. Glukhovsky et al. teach of an analogous in vivo camera system that has an imager which can have its frame capture rate varied. It also includes at least one sensor for measuring a physical property relatable to the motion of the camera system, a data processor for determining a frame capture rate after receiving data from the sensor and a controller for supplying the determined frame capture rate to the imager (see Col. 2, Lines 21-32). It would have been obvious to one

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skilled in the art at the time the invention was made to a calculating device in the apparatus of Gazdzinski to generate transmission information on the basis of data transmitted by the capsule medical device and received by the external device to provide a surgical capsule whose functions are based upon physical measurements transmitted outside the body as taught by Glukhovsky et al.

In regards to claim 12, Gazdzinski discloses a capsule medical device wherein a sensor 1010 operates on the basis of data parameters stored in the storage device (see Paragraph 0067).

In regards to claims 13 and 15, Gazdzinski discloses a capsule medical device wherein the capsule medical device has an image-acquiring device 1010 being a CCD image sensor; and the image-acquiring device operates on the basis of data parameters stored in the storage device (see Paragraph 0067).

In regards to claim 14, Gazdzinski discloses a capsule medical device wherein the image-acquiring device has an illumination device 1014; and the illumination device operates on the basis of data parameters stored in the storage device (see Paragraph 70).

In regards to claim 16, Gazdzinski discloses a capsule medical device wherein the image-acquiring device has an image data-compressing device; and the image data-compressing device operates on the basis of data parameters stored in the storage device (see Paragraph 0015).

In regards to claims 18-19, Gazdzinski discloses a capsule medical device having a medicine discharge device or a specimen recovery device, operated on the basis of information stored in the storage device (see Paragraph 0076).

Claims 17 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0103417 to Gazdzinski in view of U.S. Patent No. 6,709,387 to Glukhovsky et al. in further view of U.S. Patent Application Publication No. 2004/0106849 to Cho et al.

In regards to claim 17, Gazdzinski and Glukhovsky et al. disclose a capsule medical device 300 inserted into a body cavity, comprising: a receiving device 1027 for receiving data from outside the capsule medical device; and a storage device 1026 wherein storage data stored therein can be rewritten on the basis of the data received by the receiving device but are silent with respect to wherein the capsule medical device has a force acquiring device; and the force acquiring device operates on the basis of information stored in the storage device. Cho et al. teaches of an analogous multi-functional, bi-directional communication capsule for endoscopy further comprising a pressure sensor 100 on the external surface of the capsule body (see Fig. 3). It would have been obvious to one skilled in the art at the time of the invention to include a pressure sensor on the apparatus of Gazdzinski and Glukhovsky et al. in order to acquire a force reading within the patient's body as taught by Cho et al.

In regards to claim 27-28, Gazdzinski and Glukhovsky et al. disclose a capsule medical device but are silent with respect to wherein the calculating circuit adjusts color image values, illumination values and adjusts position data for an image sensor. Cho et

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al. teaches of an analogous multi-functional, bi-directional communication capsule for endoscopy further comprising a control unit to control the imaging sensor and the light emitter (see Paragraph 0008). It would have been obvious to one skilled in the art to have control over these parameters of the endoscopic system of Gazdzinski and Glukhovsky et al. in order to provide for optimization of image quality as taught by Cho et al.

Response to Arguments

Applicant's arguments filed May 12, 2005 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the memory being able to store control information) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Furthermore, in regards to claims 1, 22 and 24, applicant states Gazdzinski fails to teach how each element of the medical capsule "operates on the basis of information stored in the storage device". However, as broadly as claimed, the instant invention fails to overcome Gazdzinski teaching that the probe's memory contains instructions for some operation of the probe, wherein a flash memory of the DSP may be modified by way of program data transmitted to the probe via the data transfer sub-circuit (see Paragraph 002).

In regards to claim 11, applicant states Glukhovsky fails to teach rewriting control parameters in memory based upon an image detected by the capsule, which is sent to the external device for processing and correction calculation where the control parameters are a function of the sent image. However, based upon applicant's admission (pg 14 of arguments), Glukhovsky teaches a method and system for controlling a capture and display rate (data parameters) for an in vivo camera. Glukhovsky suggests modifying the capture rate by sending image frames to an image processor, then calculating differences between the incoming image frames from which the frame rate can be varied.

In response to applicant's argument to claim 17, that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., for detecting movement of the capsule) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Cho et al. teach of a pressure sensor 100, which when broadly interpreted, is a force-acquiring device.

Applicant's arguments with respect to claims 8 and 25-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Kasztejna whose telephone number is (571) 272-6086. The examiner can normally be reached on Mon-Fri, 8:30-6:00.

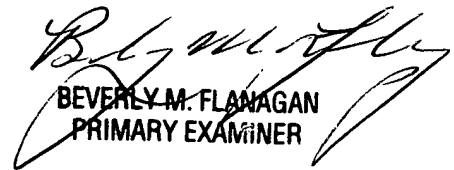
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJK

6/29/05


BEVERLY M. FLANAGAN
PRIMARY EXAMINER